Physical activity and pregnancy: time for guidance

Correspondence to:

Dr Hamish Reid

Nuffield Department of Population Health, University of Oxford, UK

hamish.reid@ndorms.ox.ac.uk

Co authors:

Dr Ralph Smith[1]

Dr Catherine Calderwood[2]

Dr Charlie Foster[1,3]

1. Nuffield Department of Population Health, University of Oxford, UK
2. Chief Medical Officer, Scottish Government, Edinburgh, UK
3. Chair of CMO Physical Activity Expert Committee - Physical Activity and Pregnancy Study Working Group

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Regular physical activity (PA) during pregnancy offers health benefits to both woman and baby. The risks of moderate intensity exercise during pregnancy are very low with no increased risk of preterm delivery, low birth weight or miscarriage.[1] Evidence suggests that regular exercise may reduce the risk of preeclampsia, gestational diabetes, excessive weight gain, DVT, fatigue, anxiety and depression and is associated with reduced length of labour, preterm birth, and delivery complications.[2,3] Given the high frequency of contact with healthcare during pregnancy and its established motivation for behaviour change, health professionals must act on this golden opportunity to promote PA.

Despite these convincing benefits, guidance on PA from health professionals is inconsistent and currently women tend to decrease their PA levels once they discover they are pregnant.[4] There is not only considerable variation internationally on advice for women, but also a dearth of recommendations for health professionals on how to encourage and support an active pregnancy.[2] Social pressure derived from widespread misconceptions amongst pregnant women and the general population may generate further barriers to PA in pregnancy.[5]

Past PA recommendations have not been consistent in addressing the relationship between PA and pregnancy. In their 2011 PA recommendations the UK CMOs emphasised the importance of achieving an active lifestyle across the life course, producing guidelines for four categories: the under 5s, children and young people, adults and older adults. Pregnancy, however, was omitted from their reviews of evidence and the panel did not make any specific PA recommendations for this group of women, despite the importance of PA for their health. The 2007 systematic review for the USA advisory committee recommended that the adult PA recommendation be applied to sedentary women during pregnancy. They also suggested active women should "*continue PA during pregnancy and the postpartum period, provided that they remain healthy and discuss with their health care provider how and when activity should be adjusted over time"*.[1] The 2010 WHO recommendations followed a similar approach stating *"pregnant, postpartum women … may need to take extra precautions and seek medical advice before striving to achieve the recommended levels of PA for this age group".*[6]

Although advice about PA can be found across many clinical guidelines and patient materials there is a lack of clarity, with the exception of consistency in advice to avoid hazardous pursuits, such as scuba diving or horse riding.[2] For example, PA promotion is recommended across a number of NICE guidelines (e.g. PH27– Weight management in pregnancy and NG3 – Diabetes in pregnancy), but these recommendations are not quantified by frequency, intensity, time or type.[7] Indeed NICE admit that "*women receive a wealth of sometimes conflicting advice on what constitutes a healthy diet and how much PA they should do during pregnancy and after childbirth"*.[7]

We welcome excellent examples of both patient and health professional guidelines in the UK, such as the documentation produced by NHS Dumfries and Galloway,[8] but NGOs, chat rooms and internet resources remain the sources that commonly fill the gap for evidence and robust advice in healthcare. Whilst some of this is excellent and evidence based, the quality is variable, unregulated and potentially confusing for women. The consistent and default conclusion of clinical and patient facing guidelines is to recommend pregnant women seek advice from their midwife or doctor about what PA is appropriate for them.

To address this situation in the UK, the CMOs recently tasked an expert committee in PA and pregnancy to review available evidence and where sufficient, make safe and evidenced based recommendations for PA during pregnancy. Following on from their recent work developing infographics representing the general PA guidelines, the anticipated output of this guidance could be an infographic to make their recommendations clear and accessible to all healthcare professionals.

In addition to this work, we suggest this area becomes a research priority for departments with the facilities to undertake translatable research to empower health professionals. Priorities are to:

- Explore the beliefs, motivators and barriers to PA in women
- Identify patient and healthcare professionals' beliefs about the role of healthcare in PA promotion
- Develop evidence based care pathways for uncomplicated pregnancies as well as high risk groups
- Develop a greater understanding of underlying mechanisms and dose response characteristics of PA in pregnancy, including objective assessment of the pattern of PA (frequency, intensity, type and duration) of PA across pregnancy

We would like to thank all healthcare professionals who currently encourage regular moderate PA during pregnancy and work hard to dispel myths such as "pregnant women are weak and fragile and that PA can cause harm to the unborn child".[5] We feel this enthusiasm and commitment deserves to be underpinned by a better quality evidence base in order to improve outcomes for women and babies.

Collaborators

On behalf of CMO Physical Activity Expert Committee - Physical Activity and Pregnancy Study Working Group:

Dr Nicola Heslehurst, University of Newcastle; Professor Lucilla Poston, Kings College London; Dr Helen Stokes-Lampard, University of Birmingham; Professor Marian Knight, University of Oxford; Professor Shakila Thangaratinam, University of London & Barts Health NHS Foundation Trust; Dr Lucy Mackillop, Oxford Radcliffe Hospitals NHS Trust & University of Oxford; Dr Anne Matthews, University of Oxford; Dr Manisha Nair, University of Oxford.

Competing Interests

None

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